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PPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	ATTORNEY DOCKET NO. CONFIRMATION NO	
10/670,141		09/24/2003	Sean Michael Kane	1676 US 7391		
24289	7590	01/10/2006		EXAMINER		
Mallinckroo	lt Inc.		DELCOTTO, GREGORY R			
675 McDonnell Boulevard PO Box 5840				ART UNIT PAPER NUMBE		
St. Louis, MO 63134				1751		

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

				11
	Applicat	ion No.	Applicant(s)	
	10/670,1	141	KANE ET AL.	
Office Action Summary	Examine	er	Art Unit	
	Gregory	R. Del Cotto	1751	
The MAILING DATE of this commu Period for Reply	nication appears on th	ne cover sheet with the c	orrespondence address	
, <u>,</u>	EOD DEDLVIC CET		C) OD TUIDTY (30) DAVC	
A SHORTENED STATUTORY PERIOD WHICHEVER IS LONGER, FROM THE  - Extensions of time may be available under the provisior after SIX (6) MONTHS from the mailing date of this con  - If NO period for reply is specified above, the maximum:  - Failure to reply within the set or extended period for rep Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF T ns of 37 CFR 1.136(a). In no e nmunication. statutory period will apply and v ly will, by statute, cause the ap	HIS COMMUNICATION vent, however, may a reply be tin will expire SIX (6) MONTHS from plication to become ABANDONE	N. nely filed the mailing date of this communication D (35 U.S.C. § 133).	
Status				
1) Responsive to communication(s) fi	led on 10/5/05.			
2a)☐ This action is <b>FINAL</b> .	2b)⊠ This action is	non-final.		
3) Since this application is in condition	n for allowance excep	t for formal matters, pro	secution as to the merits is	S
closed in accordance with the prac	tice under <i>Ex parte</i> Q	uayle, 1935 C.D. 11, 45	53 O.G. 213.	
Disposition of Claims				
4)⊠ Claim(s) <u>1-28</u> is/are pending in the	application.			
4a) Of the above claim(s) 13-26 and		from consideration.		
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>1-12 and 27</u> is/are rejecte	d.			
7) Claim(s) is/are objected to.		•		
8) Claim(s) are subject to restr	iction and/or election	requirement.		
Application Papers				
9) The specification is objected to by t	he Examiner.			
10) The drawing(s) filed on is/are	e: a) accepted or b	)☐ objected to by the I	Examiner.	
Applicant may not request that any obj	ection to the drawing(s)	be held in abeyance. See	e 37 CFR 1.85(a).	
Replacement drawing sheet(s) including	=			d).
11)☐ The oath or declaration is objected	to by the Examiner. N	lote the attached Office	Action or form PTO-152.	
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim	n for foreign priority ur	nder 35 U.S.C. § 119(a)	o-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:				
1. Certified copies of the priorit	-		an Na	
<ul><li>2. Certified copies of the priority</li><li>3. Copies of the certified copies</li></ul>				
<ol> <li>Copies of the certified copies application from the Internati</li> </ol>	, ,		tu III tilis National Stage	
* See the attached detailed Office acti			ed.	
	<u>.</u>			
Au. 4 4 .				
Attachment(s)  1) X Notice of References Cited (PTO-892)		4) Interview Summary	(PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (		Paper No(s)/Mail Da	ate	
3) Information Disclosure Statement(s) (PTO-1449 of Paper No(s)/Mail Date <u>11/4/05</u> .	or PTO/SB/08)	5) Notice of Informal P 6) Other:	atent Application (PTO-152)	
- apor reo(syrman Date <u>r 1/4/00</u> .		, <u></u>		

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#### **DETAILED ACTION**

1. Claims 1-28 are pending. Applicant's arguments and amendments filed 10/5/05 have been entered.

Claims 13-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/2/05.

Newly submitted claim 28 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 28 is drawn to a process for cleaning a microelectronic substrate which is materially different and patentably distinct from the elected invention which is drawn a cleaning composition for microelectronic substrates. The composition of the elected invention can be used in a materially different method such as a process of cleaning laundry. Claim 28 is drawn to the same subject matter of claims 13-26 which have been withdrawn from consideration as being drawn to a non-elected invention

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 28 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

## Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office action mailed 8/25/05 have been withdrawn:

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The rejection of claims 1-12 under 35 USC 103(a) as being unpatentable over Hara et al (US 2002/0128164) in view of Sahbari (US 6,455,479) has been withdrawn.

#### **Priority**

Priority has been corrected and has been granted.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 8-11, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koito et al (US 2003/0130147).

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Koito et al teach a stripping composition comprising at least one alcohol having an ether-bond in the molecule and an anticorrosive agent. See claim 1. Suitable alcohols include ethylene glycol monomethyl ether, diethylene glycol monomethyl ether, etc. See paras 67-68. Additionally, the compositions may include a weak acid such as acetic acid, propionic acid, malonic acid, etc. See para. 83. Amines may also be used in the compositions and suitable amines include monoethanolamine, diethanolamine, etc. See para. 85. It is desirable that the pH of the composition is between 6 to 12 during the use of the composition. See para. 89. The acid may be present in amounts from 0 to 15% by weight, the amine may be present in amounts from 1 to 40% by weight, and the alcohol may be present in amounts from 50% by weight or more. See para. 97. and claims 1-20. Note that, while water may be used in the composition, it is not a required component of the composition and embodiments containing no water are suggested by Koito et al. See para. 82.

Note that, with respect to the mole ratio of acid to amine of the composition as recited by the instant claims, the Examiner asserts that the broad teachings of Koito et al suggest compositions having the same mole ratio of acid to amine of the composition as recited by the instant claims because Koito et al teach compositions containing the same components in the same proportions as recited by the instant claims.

Koito et al do not teach, with sufficient specificity, a composition having the specific pH containing a nucleophilic amine, a moderate to weak acid, a glycol ether, a cosolvent, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

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It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition having the specific pH containing a nucleophilic amine, a moderate to weak acid, a glycol ether, a cosolvent, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of Koito et al suggest a composition having the specific pH containing a nucleophilic amine, a moderate to weak acid, a glycol ether, a cosolvent, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 5, 6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koito et al (US 2003/0130147) as applied to claims 1-4, 8-11, and 27 above, and further in view of Hara et al (US 2002/0128164).

Koito et al are relied upon as set forth above. However, Koito et al do not teach the use of 1-methyl-2-pyrrolidone and ethylene glycol in addition to the other components of the composition as recited by the instant claims.

Hara et al teach a resist stripper containing a peroxide, a quaternary ammonium salt, and at least one member selected from the group consisting of an amine, a water-soluble solvent, and water. Suitable amines include a monoethanolamine, diethanolamine, triethanolamine, etc. See para. 22. Suitable solvents include N-methyl-2-pyrrolidone, ethylene glycol, ethylene glycol monomethyl ether, etc. See para. 23. Additionally, an anticorrosive acid may be added including acetic acid, sebacic acid, adipic acid, etc. See para. 24. The water-soluble solvent is present from 1% to 50%,

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water is from 1% to 90%, the amine is from 1 to 50%, and the organic solvent is from 1 to 50%. See para. 25.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a solvent such as 1-methyl-2-pyrrolidone or ethylene glycol in the composition taught by Koito et al, with a reasonable expectation of success, because Hara et al teach the equivalence of 1-methyl-2-pyrrolidone or ethylene glycol to ethylene glycol monomethyl ether in a similar stripping composition and further, Koito et al teach the use of ethylene glycol monomethyl ether.

#### Response to Arguments

Note that, Applicant's arguments are moot in view of the new ground of rejection as set forth above.

#### Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory R. Del Cotto Primary Examiner Art Unit 1751

GRD December 27, 2005